

Universal Usability: Setting the Research Agenda

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INTRODUCTION

It is becoming increasingly clear that access to Information Technology (IT) provides increasing benefits for humans, so much so, that in some high tech countries, access to resources that support the quality of life for humans is being restricted increasingly to information technology. For example, price comparisons for airline tickets and opportunities to bid for or search out cheap travel options is so much more convenient through web-based interfaces, that much of this human activity has transferred to web usage.

As resources move to delivery systems that are primarily IT, people who do not have access to these systems for a variety of reasons find that their traditional paths to resources are drying up or becoming more difficult to find. This transfer of resource access happens at a time when the technology itself is moving to more sophisticated usage requirements making it more difficult for recent entrants in the information technology field to use IT effectively for resource access.

In addition, new innovations in the technology remove disabled users from access simply because it is difficult for industries that build the limited market adaptive technologies to keep up with the changes. Finally, IT is becoming global so that users from multiple cultures are faced with accessing resources that do not match their language, culture or organization of resource needs.

In essence, we are finding ourselves faced with the potential for generating a class of people who will have less access to information and resources than when the public library was down the block and the location of the nearest dentist was in the telephone directory. This is the problem. Human Computer Interaction researchers are a key set of people that can provide policy makers with information for resolving the problem. That is what this special interest group is about. We want people interested in identifying a research agenda for exploring universal usability, that is, what data is needed to help resolve the problem.

BACKGROUND

Technology does not limit access by all, but rather, the political and economic forces that surround the technology limit the access. For example, telephones and electricity were made accessible to everyone in the 1920's and 1940's via government's overseeing and disseminating the technology. Technological choices were made that connected electricity to

every home rather than having homes buy their own generators. Telephone companies were enjoined to spread the costs of laying lines to rural areas into the charges for service in urban areas.

Currently, we see many models for the distribution of IT from computers in local libraries to Internet cafes that exist worldwide. We also see many variations of products from companies. At some point, governments are going to be faced with requirements for intervening with IT in order to ensure universal access. Our community can provide important information for these decisions, but we need to focus on what this information should be.

DEFINITIONS OF UNIVERSAL USABILITY

At the moment, the concept of Universal Usability has many different interpretations. It is desired that this SIG will put some structure on the concept of what is meant by universal usability and identify its various sub parts. The focus will be to create a framework that will address the issues that policy makers will be facing in the near future. For example, below are some possible categories that are more obvious.

1. Universal access to IT for people with disabilities
2. Access to IT for people who do not have IT training
3. Access to IT for people from diverse cultures and languages
4. Access to IT for people with strong socio-economic incentives to not have such access
5. Access to IT by people with different hardware, browsers etc.

PLANS FOR THE ORGANIZATION OF THE SIG

We are inviting key people that represent different areas of importance for the universal usability issue, e.g., a sociologist working on the digital divide, an individual developing standards for handicap-accessible web pages and an economist working on IT distribution models. We plan to break into 4-5 small work sessions to discuss sub issues after an initial identification of these issues. The work groups will then re-convene and a spokesperson for each will report on the results of their discussions.

CONCLUSION

The individuals organizing this SIG are the next organizers of the Conference on Universal Usability (CUU 2002). The input from the SIG will be used to design the conference's call for participation.

